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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re: Attorney Docket No. Lashkarian 2

In re application of: Navid Lashkarian

Serial No.: 09/556,858 Group No.: 2637
Filed: 04/21/00 Examiner: David B. Lugo
Matter No.: 992.1045 Phone No.: 571-272-3043

For: Minimum Variance Unbiased and Moment Estimators of Carrier Frequency Offset in Multi-Carrier Systems

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In accordance with 37 CFR § 1.56, this is an Information Disclosure Statement (IDS) for the above-captioned U.S. patent application. An IDS Form PTO-1449 listing references is enclosed herewith and forms a part hereof. Submission of references is not an admission that those references are in fact prior art.

Certification Under 37 CFR § 1.704(d)

- [] Each item of information contained in this statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in § 1.56(c) more than thirty days prior to the filing of this statement.

Certification Under 37 CFR § 1.97(e)

- [] Each item of information contained in this statement was either (1) cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement or (2) not known to any individual designated in § 1.56(c) more than three months prior to the filing of this statement.

* * * * *

Certification Under 37 CFR 1.8

Date of Deposit January 17, 2006.

I hereby certify that this paper and any accompanying papers or fees are being deposited with the U.S. Postal Service with sufficient postage as first class mail under 37 CFR 1.8 on the date indicated above and addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Mary E. Caniz
(Name of person mailing)

Mary E. Caniz
(Signature of person mailing)

Fee Under 37 CFR § 1.97(c)

☐ The fee for submission of this IDS under § 1.97(c) is \$180.00 as set forth in § 1.17(p).

Petition Under 37 CFR § 1.97(d)

☐ This is a petition requesting consideration of an IDS under § 1.97(d). The petition fee for submission of this IDS under § 1.97(d) is \$180.00 as set forth in § 1.17(p).

Provision of Copies of References

☒ A copy of each of the listed references is enclosed herewith and forms a part hereof.

☐ A translation of each of Reference(s) ___ is enclosed herewith and forms a part hereof.

☐ A copy of the International Search Report from a corresponding PCT application is enclosed herewith.

☐ A copy of the European Search Report from a corresponding EPO application is enclosed herewith.

☐ A copy of the final U.S. office action for U.S. patent application no. _____ filed on _____ as attorney docket no. (Case name or our ref.).

☐ The above-captioned U.S. patent application is a

- ☐ continuation
- ☐ divisional
- ☐ continuation-in-part

application of U.S. application serial number ____, filed on ____ as Attorney Docket No. _____. Each of the listed references was previously cited by or submitted to the Office in the prior application. The above-captioned U.S. patent application relies upon the prior application for an earlier filing date under 35 U.S.C. 120. Pursuant to § 1.98(d), copies of the listed references are not being provided with this IDS.

Authorization To Charge Deposit Account

☒ Authorization is given to charge **Mendelsohn & Associates, P.C. Deposit Account No. 50-0782** for any fee under § 1.97(c) or § 1.97(d).

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO-1449 form as confirmation that each of the documents has been considered.

Respectfully submitted,

Date: 1/17/06

Customer No. 46900
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Enclosures

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE
(Rev. 2-32) PATENT AND TRADEMARK OFFICEINFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(Use several sheets if necessary)

ATTY. DOCKET NO.

SERIAL NO.

Lashkarian 2
APPLICANT

09/556,858

Navid Lashkarian
FILING DATE

GROUP

04/21/2000

2637

U.S. PATENT DOCUMENTS

| EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|---------------------|----|-----------------|---------|--------------|-------|----------|-------------------------------|
| | AA | US 6,618,452 B1 | 09/2003 | Huber et al. | 375 | 343 | |
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FOREIGN PATENT DOCUMENTS

| | | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION YES NO |
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

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|--|----|---|
| | AB | Kam, Pooi Yuen, "FSK Detection Using Frequency Estimator", September 1995, Electronics Letters, Vol. 31, Issue 19, pp. 1631-31. |
| | AC | Zavarsky et al., "Non-Higher Order Moment Estimation Based Method for Detection of Frequency of Signal from its Multiplicatively Corrupted Version", September 1995, Electronics Letters, Vol. 31, Issue 19, pp. 1632-34. |
| | AD | Lashkarian et al., "Minimum Variance Unbiased Estimation of Frequency Offset in OFDM Systems, a Blind Synchronization Approach", June 2000, IEEE, ICASSP, Vol. 5, pp. 2945-48. |
| | AE | Lashkarian et al., "Class of Cyclic-Based Estimators for Frequency-Offset Estimation of OFDM Systems", December 2000, IEEE Transactions on Communications, Vol. 48, Issue 12, pp. 2139-49. |
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| EXAMINER | DATE CONSIDERED |
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EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.